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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,474	09/19/2003	David Lee Steinlage	16630-US	8871

7590 08/25/2004

Patent Department  
DEERE & COMPANY  
One John Deere Place  
Moline, IL 61265-8098

EXAMINER

MAMMEN, NATHAN SCOTT

ART UNIT PAPER NUMBER

3671

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/666,474

**Applicant(s)**

STEINLAGE ET AL.

**Examiner**

Nathan S Mammen

**Art Unit**

3671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.                                                |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, 7, 9, 10, 14, 16-22 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,443,237 to Myers et al.

The Myers '237 patent discloses a deep tillage point structure adapted for connection to an upright shank (12) for forward movement through compacted soil. The structure comprises a main body (20) having a fore-and-aft extending leading nose (26) with a front surface that extends upwardly and rearwardly from a nose leading edge (28). A tapered top surface (50) extends rearwardly and upwardly from the front surface (see Fig. 3) and includes outwardly facing surfaces forming an apex (62). The surfaces cause a parting stress of the soil. See. Col. 2, lines 54-65.

Regarding claims 3, 7, 9, 10, 14, 16-22: A shin member (14) having a sharp edge extends vertically from an aft portion of the nose. The tillage point is constructed of austempered ductile iron (col. 3, line 15). The point further comprises wings (36) having a lift angle of 15 degrees (col. 4, line 19) and slope downwardly at an angle of less than 15 degrees (col. 4, lines 14-15). The wings having leading edges angled rearwardly at an acute angle (col. 4, lines 21-22). The leading edges of the wings enter the soil at a level just above the level of entry of the leading edge (28) (see Fig. 1). The aft edges of the wings terminate forward an aft edge of the shank.

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The main body has a bifurcated attaching area (76, 80) adapted to receive a lower mounting end of the shank

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 4, 5, 6, 8, 11-13, 15, 23, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,443,237 to Myers et al.

The Myers '237 patent discloses the structure and arrangement of the tillage point, as stated in paragraph 2 above. While the Myers '237 patent does not disclose some particular angles between structural members or dimensions of structural members, providing a tillage point with these angles and dimensions would be obvious to one having ordinary skill in the art, since it has been held that where the general conditions of a claim are disclosed (such as the structure here) discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233 (CCPA 1955).

***Conclusion***

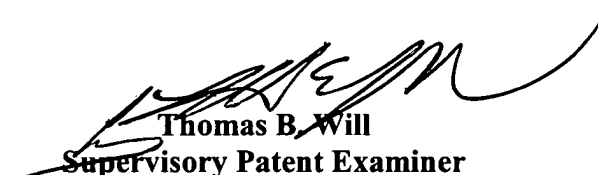
5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Mammen whose telephone number is (703) 306-5959. The examiner can normally be reached Monday through Thursday from 6:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached at (703) 308-3870. The fax number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-1113.



Thomas B. Will  
Supervisory Patent Examiner  
Group 3600

NSM  
8/18/04

Nathan S. Mammen